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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/734,855	12/12/2003	Karthigan Srinivasan	200314071-1	1530

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EXAMINER	
PARK, ILWOO	

ART UNIT	PAPER NUMBER
2182	

DATE MAILED: 09/30/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/734,855	SRINIVASAN ET AL.	
	Examiner	Art Unit	
	Ilwoo Park	2182	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *12 December 2003*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-20* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1,3-9,12-15 and 17-20* is/are rejected.

7)☒ Claim(s) *2,10,11 and 16* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

1. Claims 1-20 are presented for examination.

Claim Objections

2. Claim 10 is objected to because of the following informalities: claim dependency is not correct; the limitations in claim including the first and second logic gates reflects that claim 10 would be dependent upon claim 9. Appropriate correction is required.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1, 4, 5, 7, 8, 12-14, 17, 18, and 20 are rejected under 35 U.S.C. 102(b) as being anticipated by Richter et al., US patent No. 6,149,319.

As to claim 1, Richter et al teach a system, comprising:

a bridge [card controller 1204 in fig. 11];

a slot [card slot 1206] into which an add-in card [col. 20, lines 16-22] having one of a plurality of types [col. 4, lines 34-36] can be installed, said slot coupled to the bridge; and

a power control unit [power switching unit 1212] coupled to the slot via a common power rail [slot voltage line 1216] and coupled to the bridge;

wherein, after installing the add-in card, the bridge determines [col. 21, lines 10-14] the type of add-in card installed and asserts a logic signal to the power control unit

and wherein, based on the logic signal, the power control unit provides [col. 22, lines 20-39] one of a plurality of direct current ("DC") voltages on the common power rail to the slot.

5. As to claim 4, Richter et al teach the power control unit causing the common power rail to be initially at a ground potential during system initialization [col. 19, lines 9-10].

6. As to claim 5, Richter et al teach the power control unit comprises a first power transistor [e.g., transistor 1232] that is adapted to provide a first DC voltage onto the common power rail and a second power transistor [e.g., transistor 1234] that is adapted to provide a second DC voltage onto the common power rail, wherein the first and second transistors are individually selected in response to the logic signal asserted by the bridge.

7. As to claim 7, Richter et al teach the add-in card can be installed while the system is powered on and operational [col. 22, lines 34-39].

8. As to claim 8, Richter et al teach a power control unit configurable to provide [col. 4, lines 34-36] one of a plurality of voltages on a common power rail [slot voltage line 1216] to a load, comprising:

a first power switch [e.g., transistor 1232 in fig. 12] that is adapted to provide a first voltage [HPSV] to a load over a power rail [slot voltage line 1216];

a second power switch [e.g., transistor 1234] that is adapted to provide a second voltage [LPSV] to the load on the power rail; and

wherein the first power switch and the second power switch are responsive to a logic signal [col. 21, lines 15-22] specifying whether the first power switch or the second power switch is to provide [col. 22, lines 20-39] the first voltage or the second voltage, respectively, on the common power rail to the load.

9. As to claim 12, Richter et al teach the power switches cause the voltage on the power rail to be at a ground potential at system initialization [col. 19, lines 9-10].

10. As to claim 13, Richter et al teach during system power down, the power control unit actively prevents both the first and second power switches from supplying voltage to the common power rail [col. 22, lines 34-39].

11. As to claim 14, Richter et al teach a system, comprising:

a slot [card slot 1206] into which an add-in card [col. 20, lines 16-22] that comports with one of a plurality of types [col. 4, lines 34-36] can be installed, said slot coupled to the bridge [card controller 1204 in fig. 11];

a bridge [card controller 1204 in fig. 11] that is adapted to determine [col. 21, lines 10-14] the type of add-in card installed in the slot; and

means for causing a voltage on a power rail [slot voltage line 1216] to a load to be at a ground potential [col. 19, lines 9-10] and for subsequently causing the voltage on the power rail to transition [col. 22, lines 20-39] to one of a plurality of voltages depending on the type of add-in card installed in the slot.

12. As to claim 17, Richter et al teach a method, comprising:

determining [col. 21, lines 10-14] a type of card installed in a system; and

selectively providing [col. 22, lines 20-39] one of a plurality of voltages on a single power rail to the card based on the type of card.

13. As to claim 18, Richter et al teach turning on a first power transistor [e.g., transistor 1232 in fig. 12] or a second power transistor [e.g., transistor 1234], the first power transistor configured to provide a first voltage [HPSV] on the power rail and the second power transistor configured to provide a second voltage [LPSV] on the power rail.

14. As to claim 20, Richter et al teach forcing the voltage on the power rail to a ground potential during at least a portion of initialization of the system [col. 19, lines 9-10; col. 22, lines 34-39].

Claim Rejections - 35 USC § 103

15. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

16. Claims 3, 6, 9, 15, and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Richter et al., US patent No. 6,149,319.

As to claims 3, 15, and 19, though Richter et al teach the plurality of DC voltages comprises 3.3 VDC [col. 22, lines 22-32; figs. 12-14], Richter et al do not expressly disclose the plurality of DC voltages comprises 1.5 VDC. However, an application using 1.5 VDC as a supply voltage is well known in the art such as AGP slot. Therefore, it would have been obvious to one of the ordinary skill in the art at the time the invention

was made to include 1.5 VDC in the plurality of DC voltages of Richter et al in order to increase applicability and to power consumption [col. 1, lines 46-65].

As to claim 6, though Richter et al teach the add-in card would be a plurality of different protocol compliant cards including a PCI compliant card [col. 20, lines 16-22], Richter et al do not expressly disclose the add-in card comprises a PCI-X compliant card. An add-in card comprising a PCI-X compliant card is well known in the art. Therefore, it would have been obvious to one of the ordinary skill in the art at the time the invention was made to include an add-in card comprising a PCI-X compliant card n order to increase adaptability.

As to claim 9, Richter et al teach a first logic gate [implicit to ENHPSV 1215 in fig. 12] couple to the first power switch and a second logic gate [implicit to ENLPSV 1213 in fig. 12] couple to the second power switch and only one of the two power switch is enabled [col. 22, lines 33-34]. Richter et al do not disclose using an inverter to the one of the two power switch enable; however, using an inverter to the one of the two power switch enable would be well known in the art to one of ordinary skill in the art in order to simplify a circuit design.

Allowable Subject Matter

17. Claims 2, 10, 11, and 16 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

18. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ilwoo Park whose telephone number is (571) 272-4155. The examiner can normally be reached on Monday through Friday from 9:00 AM to 5:30 PM. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dov Popovici can be reached on (571) 272-4083. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

ILWOO PARK
PRIMARY EXAMINER

Ilwoo Park
September 28, 2005